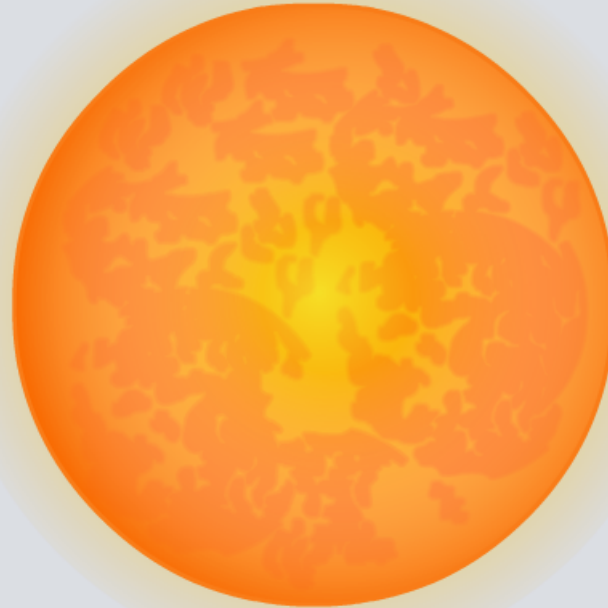


Heat



How is heat transferred?

Where and how is heat transfer taking place at this seaside?



Why does heat transfer happen?

Heat is a type of energy called **thermal energy**.

Heat can be **transferred** (moved) by three main processes:

1. **conduction**
2. **convection**
3. **radiation**

During heat transfer, thermal energy **always** moves in the same direction:



Heat energy only flows when there is a temperature difference from a **warmer** area to a **cooler** area.

Why do objects get hotter or colder?

Temperature is a measure of how hot an object is.

Heat transfer only takes place when there is a **temperature difference**. The heat energy flows from a warmer area to a cooler area.

Why does a popsicle melt on a warm tongue?

There is a temperature difference between the tongue and the popsicle, so heat energy flows from the warm tongue into the cold popsicle.

This heat transfer means that the popsicle melts as it gets warmer, and the warm part of the tongue touching it gets cooler.

